PATENT COOPERATION TREATY

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	see form PCT/ISA/220		WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHOF (PCT Rule 43 <i>bis</i> .1)	
		-	Date of mailing (day/month/year) se	e form PCT/ISA/210 (second sheet)
	licant's or agent's file reference e form PCT/ISA/220		FOR FURTHER ACTION See paragraph 2 below	
	mational application No. T/GB2004/002730	International filing date (c 25.06.2004	(day/month/year) Priority date (day/month/year) 28.06.2003	
	mational Patent Classification (IPC) of 6H5/00	r both national classification	and IPC	
	icant DMEL AUTOMATION LIMITE	D		
1.	 Box No. IV Lack of unity of Box No. V Reasoned state applicability; of Box No. VI Certain docum □ Box No. VII Certain defect 	pinion ment of opinion with rega of invention tement under Rule 43 <i>bis.</i> itations and explanations nents cited s in the international appl	ard to novelty, inventive. 1(a)(i) with regard to its supporting such state.	e step and industrial applicability novelty, inventive step or industrial ement
	☐ Box No. VIII Certain observ			
	International Bureau under Rule will not be so considered. If this opinion is, as provided about the IPEA a written reol	al Preliminary Examining ity other than this one to 66.1 bis(b) that written op ove, considered to be a wy together, where appropor Form PCT/ISA/220 or be	Authority ("IPEA"). He be the IPEA and the coinions of this Internation of the IPEA and the IPEA	owever, this does not apply where thosen IPEA has notifed the ional Searching Authority
	For further options, see Form PC			

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WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY

International application No. PCT/GB2004/002730

_						
_	Вс	OX N	o. I Basis of the opinion			
1.	Wi the	With regard to the language , this opinion has been established on the basis of the international application in the language in which it was field, unless otherwise indicated under this item.				
		ici	nis opinion has been established on the basis of a translation from the original language into the following nguage , which is the language of a translation furnished for the purposes of international search nder Rules 12.3 and 23.1(b)).			
2.	With regard to any nucleotide and/or amino acid sequence disclosed in the international application and necessary to the claimed invention, this opinion has been established on the basis of:					
	a. type of material:					
			a sequence listing			
			table(s) related to the sequence listing			
	b. format of material:					
			in written format			
			in computer readable form			
	c. time of filing/furnishing:					
	1		contained in the international application as filed.			
	١		filed together with the international application in computer readable form.			
	l		furnished subsequently to this Authority for the purposes of search.			
3.		CO	addition, in the case that more than one version or copy of a sequence listing and/or table relating thereto is been filed or furnished, the required statements that the information in the subsequent or additional pies is identical to that in the application as filed or does not go beyond the application as filed, as propriate, were furnished.			
4.	Additional comments:					

WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY

International application No. PCT/GB2004/002730

-			
-		Box No. II	Priority
1	1. [2	☑ The fo	llowing document has not been furnished:
		⊠	copy of the earlier application whose priority has been claimed (Rule 43bis.1 and 66.7(a)).
			translation of the earlier application whose priority has been claimed (Rule 43bis.1 and 66.7(b)).
			quently it has not been possible to consider the validity of the priority claim. This opinion has heless been established on the assumption that the relevant date is the claimed priority date.
2	. C		pinion has been established as if no priority had been claimed due to the fact that the priority claim en found invalid (Rules 43 <i>bis.</i> 1 and 64.1). Thus for the purposes of this opinion, the international ate indicated above is considered to be the relevant date.
3	. A	dditional d	observations, if necessary:
_			
_	В	lox No. IV	Lack of unity of invention
1.	. 🗵	In resp	onse to the invitation (Form PCT/ISA/206) to pay additional fees, the applicant has:
		⋈	paid additional fees.
			paid additional fees under protest.
			not paid additional fees.
2		Thic Ar	thority found that the many
۷.			thority found that the requirement of unity of invention is not complied with and chose not to invite licant to pay additional fees.
3.	Tł	nis Authori	ty considers that the requirement of unity of invention in accordance with Rule 13.1, 13.2 and 13.3 is
		complied	with
	Ø	not comp	lied with for the following reasons:
		see sep	parate sheet
4.	Co	nsequent	y, this report has been established in respect of the following parts of the international application:
		all parts.	
		the parts	relating to claims Nos.

WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY

International application No. PCT/GB2004/002730

Box No. V Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

Novelty (N)

Yes: Claims

3,4

No: Claims

1-2,5-9

Inventive step (IS)

Yes: Claims

4

No: Claims

1-3,5-9

Industrial applicability (IA)

Yes: Claims

1-9

No: Claims

2. Citations and explanations

see separate sheet

Re Item IV.

The separate potential inventions/groups of potential inventions are:

Claims 1-3,5-9 : Bonding and drive means

Claim 4 : Pin portion

They are not so linked as to form a single general inventive concept (Rule 13.1 PCT) for the following reasons:

The only features common to the two potential inventions are the features of independent apparatus claim 1. These features are well known from the prior art, as disclosed by documents GB1044894 (cf. figure 1; page 2, lines 18-22), US3808080 (cf. figures 1,4,5; column 4, lines 2-10), US2609481 (cf. column 6, lines 45-68), and thus do not constitute special technical features as defined in PCT Rule 13.2.

The remaining features of the two potential inventions solve two different problems by means of different potential special technical features.

The problem to be solved by the first potential invention (claims 1-3,5-9) is the linear sequential joining of two superposed flexible sheet materials. The features which solve this problem are the bonding and drive means.

The problem to be solved by the second potential invention (claim 4) is the easy angular manoeuvring of the flexible sheet material. The feature which solves this problem is the pin portion around which the flexible sheet material can be pivoted.

Since the problems to be solved by the two potential inventions and the features which solve these problems are different, the different technical features cannot be considered to be corresponding special technical features as required by PCT Rule 13.2.

Re Item V.

1 The following documents are referred to in this communication:

D1: GB 1 044 894 A (OMEGA LAB LTD) 5 October 1966 (1966-10-05)

D2: US 3 808 080 A (PARRY F) 30 April 1974 (1974-04-30)

D3: US 2 609 481 A (HANS HACKLANDER) 2 September 1952 (1952-09-02)

D4: US 2 322 298 A (HARRY JOHNSTON) 22 June 1943 (1943-06-22)

D5: US 2 480 882 A (SCHMIDT WILLIAM E ET AL) 6 September 1949 (1949-09-06)

2 INDEPENDENT APPARATUS CLAIM 1 - NOVELTY

The present application does not meet the criteria of Article 33(1) PCT, because the subject-matter of claim 1 is not new in the sense of Article 33(2) PCT.

Document D1 discloses (the references in parenthesis applying to this document):

a seaming apparatus for joining, along a seam without thread, at least two superposed flexible sheet materials (6), said seaming apparatus comprising

- bonding means (3,4) for bonding together at least two flexible sheet materials (6), said bonding means (3,4) having a nip portion for releasably engaging together sheet material (6) in use of the apparatus;
- and drive means (7) formed and arranged for engaging sheet material (6), in use and to be bonded, and moving incrementally sheet material (6) through said bonding means (3,4), said drive means (7) being formed and arranged to cooperate with said nip portion so as to sequentially nip then drive material (6) through the apparatus wherein only one of said nip portion and said drive means (7) is in contact with sheet material (6), in use of the apparatus, at any given moment (cf. column 2, lines 18-22).

The subject-matter of claim 1 is also disclosed by documents D2,D3,D4,D5 (cf. the passages cited in the International Search Report).

3 INDEPENDENT METHOD CLAIM 9 - NOVELTY

For the same reasons, the corresponding method according to claim 9 lacks novelty over document D1.

The subject-matter of claim 9 is also disclosed by documents D2,D3,D4,D5 (cf. the

passages cited in the International Search Report).

4 DEPENDENT CLAIMS 2, 3, 5-8

Dependent claims 2, 3, 5-8 do not contain any features which, in combination with the features of any claim to which they refer, meet the requirements of the PCT in respect of novelty and/or inventive step (Article 33(2) and (3) PCT), as they come within the scope of D1,D2,D3,D4,D5 or the common practice of the person skilled in the art.

5 DEPENDENT CLAIM 4

The subject-matter of dependent claim 4 differs from D1, which is considered to represent the most relevant state of the art, in that the seaming apparatus comprises a pin portion formed and arranged to hold in said apparatus, flexible sheet material, in use of the apparatus, at a time when it is not engaged by either the drive means or the bonding means, enabling flexible sheet material in use of the apparatus to be pivoted therearound (further referred to as special technical feature or STF).

The problem to be solved by the present invention may be regarded as the easy manoeuvring of a seam shape.

The available prior art neither discloses nor render obvious a seaming apparatus including the above-mentioned STF.

Therefore, the subject-matter of dependent claim 4 is new and involves an inventive step.